

## ABSTRACT OF THE DISCLOSURE

An apparatus and method for a time division multiple access (TDMA) network backbone comprising a plurality of nodes interconnected by links. Each node has receive antennas and transmit antennas for communicating radio frequency (RF) bursts, and a node control for communicating node information. The receive antennas are operated in accordance with TDMA receiving slots and the transmit antennas are operated in accordance with TDMA transmit slots. A timing reference subsystem provides timing signals for the nodes for efficiently utilizing the transmission links formed between given nodes.